Appl. No. 10/004,765
Response Dated December 17, 2007
Reply to Office Action of September 17, 2007

Docket No.: 1020.P11401
Examiner: Mattis, Jason E.
TC/A.U. 2616

REMARKS

Claims 1, 3-5, 7, 8, 10-14, 16-19, 21, 23, 24, 26, 27, and 29-33 are pending in this application. Favorable reconsideration and allowance of the pending claims are respectfully requested.

35 U.S.C. § 103

Claims 1, 3-5, 7,8, 11-14 and 16-19 were rejected under 35 USC §103(a) as being unpatentable over Aiki et al. (U.S. Pat 5410540) (hereinafter "Aiki") in view of Pal et al. (U.S. Pat 6272567 B1) (hereinafter "Pal") and Sun et al. (US Pat 6574194 B1) (hereinafter "Sun").

Claims 10 was rejected under 35 USC §103(a) as being unpatentable over Aiki in view of Pal and Sun and further in view of Medina et al. (U.S. Publication US 2005/0041579 A1) (hereinafter "Medina").

Claims 21, 23, 24, 26, 27, and 29-33 were rejected under 35 USC §103(a) as being unpatentable over Aiki et al. in view of Pal, Sun and Moy-Yee et al. (U.S. Pat 6724761) (hereinafter "Moy-Yee"). Applicant respectfully traverses these rejections.

The Office Action has failed to meet its burden of establishing a *prima facie* case of obviousness. According to MPEP § 2143, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations. The teaching

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or suggestion to make the claimed combination and the reasonable expectation of success

must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck,*

947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

As recited above, to form a *prima facie* case of obviousness under 35 U.S.C §

103(a) the cited references, when combined, must teach or suggest every element of the

claim. *See* MPEP § 2143.03, for example. Applicant respectfully submits that the Office

Action has not established a *prima facie* case of obviousness because the cited references,

taken alone or in combination, fail to teach or suggest every element recited in claims 1,

3-5, 7, 8, 10-14, 16-19, 21, 23, 24, 26, 27, and 29-33. Therefore claims 1, 3-5, 7, 8, 10-

14, 16-19, 21, 23, 24, 26, 27, and 29-33 define over the cited references, whether taken

alone or in combination. For example, claim 1 recites the following language, in relevant

part:

> a first memory comprising multiple segments, each segment comprising multiple
> independently addressable channels, the first logic circuit configured to determine
> a number of channels and segments needed to store the number of copies of the
> input data frame, the first memory coupled to the first logic circuit and configured
> to store multiple copies of the input data frame within a single segment of the
> determined number of segments and to read the multiple copies of the input data
> frame from the single segment in a single read cycle

As correctly noted in the Office Action, the above-recited language is not disclosed by

Aiki. According to the Office Action, the missing language is disclosed by Pal at column

10, line 31 – column 11, line 10. Applicant respectfully disagrees.

Applicant respectfully submits that Pal fails to disclose the missing language of

the claimed subject matter. For example, the Pal at the given cite, in relevant part, states

Consider an example of such operation with the previous illustration of a system with 16 I/O resources and an AMPIC DRAM with 16 ports, wherein each port is 4 bits wide and the buffer size is 256 bits. A multicast table can be built from 2 AMPIC DRAM devices stacked together, resulting in a data port width of 8 bits and a buffer size of 512 bits. A single multicast destination address, QOS and other miscellaneous information is a total of 16 bits. The AMPIC buffer can store 32 packed multicast addresses (512 bits/16 bits) and can return a buffer containing 32 packed multicast addresses over an 8 bit wide data port in 64 clock cycles, (512 bits/8 bits). If 16 multicast SOP PIPs are processed simultaneously, the AMPIC DRAM can return 16 buffers or 512 (32.times.16) multicast destination addresses in 64 clock cycles. A multicast table stored in fast SRAM would take 512 cycles to read 512 destination addresses assuming a single cycle per read. The AMPIC memory thus has a clear advantage in the multicast application.

Pal arguably discloses a system that processes packed destination addresses during the explosion of multicast "SOP PIPs." More specifically, the cited portions of Pal arguably disclose the use of AMPIC DRAM as a multicast table to store destination addresses that are used to create new "SOP PIPs" during a multicast explosion. The system disclosed by Pal arguably discloses the use of an AMPIC buffer that requires at least 64 clock cycles to return 32 or more packed multicast addresses. By way of contrast, the claimed subject matter discloses a "first memory coupled to the first logic circuit and configured to store multiple copies of the input data frame within a single segment of the determined number of segments and to read the multiple copies of the input data frame from the single segment in a single read cycle." Applicant respectfully submits that the cited portions of Pal fail to disclose storing multiple copies of an input data frame within a single segment of memory such that the input data frames can be stored and read from the single segment in a single clock cycle. Therefore, Pal fails to disclose, teach or suggest the missing language. Consequently, the cited references, whether taken alone or in combination, fail to disclose, teach or suggest every element recited in claim 1.

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Furthermore, if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. *See* MPEP § 2143.03, for example. Accordingly, removal of the obviousness rejection with respect to claims 3-5, 7, 8 and 10-13 is respectfully requested. Claims 3-5, 7, 8 and 10-13 also are non-obvious and patentable over the cited references, taken alone or in combination, at least on the basis of their dependency from claim 1. Applicant, therefore, respectfully requests the removal of the obviousness rejection with respect to these dependent claims.

Claims 14, 21 and 29 recite features similar to those recited in claim 1. Therefore, Applicant respectfully submits that claims 14, 21 and 29 are non-obvious and are patentable over the cited references for reasons analogous to those presented with respect to claim 1. Accordingly, Applicant respectfully requests removal of the obviousness rejection with respect to claims 14, 21 and 29. Furthermore, Applicant respectfully requests withdrawal of the obviousness rejection with respect to claims 16-19, 23, 24, 26, 27 and 30-33 that depend from claim claims 14, 21 and 29 and therefore contain additional features that further distinguish these claims from the cited references.

Conclusion

For at least the above reasons, Applicant submits that claims 1, 3-5, 7, 8, 10-14, 16-19, 21, 23, 24, 26, 27, and 29-33 recite novel features not shown by the cited references. Further, Applicant submits that the above-recited novel features provide new and unexpected results not recognized by the cited references. Accordingly, Applicant submits that the claims are not anticipated nor rendered obvious in view of the cited references.

Applicant does not otherwise concede, however, the correctness of the Office

Action's rejection with respect to any of the dependent claims discussed above.

Accordingly, Applicant hereby reserves the right to make additional arguments as may be

necessary to further distinguish the dependent claims from the cited references, taken

alone or in combination, based on additional features contained in the dependent claims

that were not discussed above. A detailed discussion of these differences is believed to

be unnecessary at this time in view of the basic differences in the independent claims

pointed out above.

It is believed that claims 1, 3-5, 7, 8, 10-14, 16-19, 21, 23, 24, 26, 27, and 29-33

are in allowable form. Accordingly, a timely Notice of Allowance to this effect is

earnestly solicited.

The Examiner is invited to contact the undersigned at 724-933-9338 to discuss

any matter concerning this application.

The Office is hereby authorized to charge any additional fees or credit any

overpayments under 37 C.F.R. § 1.16 or § 1.17 deposit account 50-4238.

Respectfully submitted,

KACVINSKY LLC

/John F. Kacvinsky/
John F. Kacvinsky, Reg. No. 40,040
Under 37 CFR 1.34(a)

Dated: December 17, 2007

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